

PLANTS

Dinosaurs Had Christmas Trees

DEC 18, 2012 07:08 AM ET // BY TIM WALL



The Christmas trees under which children tear open their presents haven't changed much since the days when velociraptors tore open their prey beneath the trees' boughs.

A comparison of different species of conifers' genes revealed that the trees' DNA hadn't mutated much in 100 million years. Conifers haven't spruced up their DNA nearly as much as flowering plants since the two lines diverged from each other approximately 300 million years ago.

PHOTOS: Reindeer Help Christmas Trees Grow

"Conifers appear to have achieved a balance with their environment very early," said study leader Jean Bousquet of the Université Laval in France in a press release. "Still today, without artifice, these plants thrive over much of the globe, particularly in cold climates. In contrast, flowering plants are under intense evolutionary pressure as they battle for survival and reproduction," he concludes.

Merry christmas



Bousquet's study examined spruce and pine genomes. Although the plants became separate species approximately 100 million years ago, many of their genes were still located in the same places on their DNA. A detailed analysis of 1,801 spruce genes also found signs of slow rates of mutation.

NEWS: Buy a Real Tree For a Green Christmas

The genetic findings are backed up by the current numbers of species of conifers and flowering plants. A slow rate of change may partially explain why there are far fewer species of conifers than flowering plants. There are approximately 600 species of conifers on the planet, compared to 400,000 species flowering plants.

The study was published in the journal [BMC Biology](#).